



Nepal Health Sector Support Programme III (NHSSP – III)

05 June 2020



Ministry of Health and Population

Nepal Health Sector Support Programme (NHSSP)

Report on completion of preparation of standard design of 300 bedded infectious disease hospital and 50 bedded infectious disease department proposed and budgeted for construction by MoHP in different provinces of Nepal.

27 September 2020

1. BACKGROUND

The Nepal Health Sector Support Programme (NHSSP) -3's one of the major support areas is intended to deliver functional and efficient health infrastructure development capacity within the Ministry of Health and Population (MoHP) and Department of Urban Development and Building Construction (DUDBC). In this line NHSSP has supported MoHP for the development of standard design of health facilities with implementation guidelines in the past and continuously supporting the Ministry of Health and Populations (MoHP), Ministry of Social Development under different provinces and DUDBC to plan and design different types of health facilities in line with the standard design and guidelines as part of enhancing the capacity of all level to government for rationale planning and implementation of health infrastructures.

Nepal until date has only one infectious disease Hospital in located in Kathmandu under the jurisdiction of the Ministry of Health and Population (MoHP). With the breakout of Covid 19 pandemic across the Globe and Nepal also getting highly affected by the pandemic, the Ministry of Health and Population as future preparedness to deal with similar mass infection situation has come up with the plan to expand infectious disease hospitals and departments in different provinces of Nepal. The plan envisages establishment of 300 bedded infectious disease hospital at the provincial level and addition of 50 bedded infectious disease departments to different secondary and tertiary level hospitals in the country. The effort comes as the decentralisation of the infectious disease control services across the country enabling the country to respond to the similar situation arising in the future effectively at the same time reducing the dependency on the only infectious disease Hospital in Teku in Kathmandu.

Ministry of Health and Population (MoHP) sought support from NHSSP for the preparation of standard prototype designs for 300 bedded infectious disease hospital and 50-bedded infectious disease departments.

2. PURPOSE AND OBJECTIVES

The objective of the support is to develop standard prototype design for 300-bedded infectious Hospital and 50 bedded infectious disease departments for planning and budgeting of expansion of the infectious disease across the country, within the scope of NHSSP's ongoing support to MOHP in the capacity building in designing and planning of Health infrastructures. The purpose of the is to enable the concerned provinces or authority receiving the budget for 300 bed infectious disease hospital or 50 bedded infectious disease department adopt the standardised design for the implementation. MoHP has made the

budget allocation through the annual work plan and budget for the fiscal year 2077/78 (2020/2021).

3. METHODOLOGY

The architectural design have been based on existing standard designs and guidelines for health infrastructure designs in conjunction with the WHO guidelines for Covid treatment facilities such as recommended bed spacing, segregation of spaces using multiple doors, formation of sterile corridors, provision of donning and doffing areas for service providers at appropriate locations. Appropriate spaces for diagnostic areas, outpatient department, emergency department, operation theatre, ICU, inpatient areas for general patient and patient requiring isolated treatment, waiting areas, triage spaces, disinfecting units and appropriate sanitary and water supply layouts have been provided in the design (drawing's attached in annex 1).

Environmental concerns have been given high priority through use of natural lights and ventilations for all the functions. Priority has also been given to LNOB and GESI perspective in the design. Provision of front desk volunteer counter and Social Service Unit (SSU) have been made in the design to support the targeted population such as people with disabilities, senior citizens, helpless people, poor people and disadvantaged people to seek access to the free health services provided by the government. The whole facility has been made disabled friendly with wheel cheer access by means of ramp or lifts to all the functions in all the floors in the facility. Adequate number of toilets for male and female have been provided in the design. Adequate number of disabled friendly toilets have also been provided.

NHSSP team developed the concept plan with layout and detail requirements and shared it with high-level officials from MoHP after which first draft of the standard designs were prepared. The drawings and costing of the proposed facilities were discussed and presented to the concerned officials from MoHP at different stages. Based on the feedbacks received the standard designs were finalised with the costing and approved by the Ministry. The scanned copy of the letter from the MoHP acknowledging the receipt with thanks is attached herewith the report in **annex one**. The finalised design has been provided with instruction for preparing the detail design by the concerned provincial and local government receiving the fund. The instruction is provided in **annex two**. The liability of developing the detailed engineering drawings such as structural drawings, HVAC, sanitary design, electrical design will remain with the concerned institution receiving the funds from MoHP for the construction. The concerned local governments receiving the fund will be responsible for all the required approval process of the detailed design documents from appropriate authority and will execute the construction process themselves.

4. DELIVERABLES

Preparation of 'Standard Design for 300 bedded infectious disease hospital and 50 bedded infectious disease department has been completed and submitted to MoHP as standard design drawings. Estimated cost based on standard rates of construction for health facilities per square meter of construction in accessible areas derived from latest estimation of health facilities was applied for the budgeting purpose. The costing analysis is presented in **annex three**. This has enabled MoHP for allocation of budget to the different provinces and institution together with the standard design.

The standard design includes all floor plans, elevations, section and 3d drawings, land requirement and instruction for developing detailed implementation documentation for the construction of these facilities. The details standard design drawings are attached as **annex four** to the report in PDF format.

Support has also been made to MoHP for the development of design of prototype for 50-bedded emergency to be expanded in different tertiary level Hospital in the country with 500-bed capacity. The design has been approved by MoHP and has been adopted as the standard design. Similarly, support has also been provided to MoHP for prototype design of health help desk centres planned and budgeted for construction at different border entry points of Nepal. The design has been agreed by MoHP and detail costing, sanitary design, electrical design and structural design are being finalised by the NHSSP team. Support was also provided to Department of Health Services (DoHS) for development of design for Covid-19 support health help desk at the Tribhuvan International Airport in Kathmandu, which is still under discussion for implementation.

MoHP was also supported for mapping of health facilities in different provinces to support the provincial level planning of health facilities for Covid -19 treatment. In addition, NHSSP team also developed information and mapping of health facilities with potential to be converted into Covid-19 isolation centres along with proposed design for repurposing. The proposed potential facilities includes the health training centres and standard primary health care centres constructed in the past by the government. The proposal was also discussed with other EDPS supporting the temporary expansion of Covid-19 isolation centres under the leadership of EDCD/DoHS supported by WHO. Different isolation centre establishment modalities were also discussed during the meeting. Decision from the concerned authorities on the adaptation of modalities is awaited yet.